

**Actuarial Report
Basic Health Program's Benefit Design
Department of Social and Health Services
Medical Assistance Administration
State of Washington**

Milliman USA, Inc. (Milliman) has been commissioned by the State of Washington Department of Social and Health Services Medical Assistance Administration (MAA) to prepare an actuarial report with respect to the actuarial value of coverage of the benchmark plan selected by MAA and the actuarial value of coverage offered under the proposed Benefit Package for parents of Medicaid Children. This benefit package is equivalent to the Basic Health (BH) Program administered by the Health Care Authority. The purpose of the actuarial memorandum is to demonstrate consistency with the requirements set forth in Title XXI of the Social Security Act. Specifically, this report has been prepared to illustrate that the proposed coverage has aggregate actuarial value equivalent to or better than the value of the benchmark package. This memorandum may not be appropriate for other purposes.

I. BENCHMARK BENEFIT PACKAGE

The benchmark benefit package selected by MAA for determination of actuarial equivalency is the Uniform Medical Plan (UMP). The UMP is a health benefits coverage plan that is administered by the state's Health Care Authority and generally available to state employees in the State of Washington. The UMP is a PPO plan. We assumed 90% in-network participation. A summary of the benefits provided under the UMP plan is provided in Appendix A.

II. BASIC HEALTH PROGRAM

MAA has chosen the Basic Health (BH) Program to provide health benefit coverage to parents of Medicaid eligible children. A summary of the BH's benefit design is provided in Appendix B.

III. DETERMINATION OF ACTUARIAL VALUES

A. METHOD

Actuarial cost models were developed for the benchmark benefit package and the proposed benefit package. These cost models provide the net projected per member per month cost of benefits. The models were developed using the *Milliman Health Cost Guidelines*[™] (HCGs) as the standard utilization basis for the calculation of actuarial equivalency. The HCGs are an internal Milliman resource developed through research that provide standardized utilization rates and adjustment factors to reflect geographic area, demographics, and covered services. As required, the cost models were developed without taking into account any differences in coverage based on

the method of delivery or means of cost control or utilization used. The assumptions used in the actuarial analysis of the benchmark plan are the same as those used in the analysis of the proposed plan. The assumptions have been used consistently throughout the actuarial analysis.

B. ASSUMPTIONS

Utilization Factors

Utilization factors in the actuarial cost models were developed using the HCGs with adjustments to reflect the benefit plan design, age and gender demographics, and geographic region. The HCGs starting utilization factors were adjusted to reflect the geographic region of the State of Washington. The geographic region adjustment was required since the starting factors are nationwide average values.

Price Factors

The price factors were developed based on average commercial reimbursement, discounted by 50% to approximate Medicaid reimbursement rates. Prescription drugs were discounted by a lesser amount to reflect typical marketplace savings. This basis was chosen as the standardized set of pricing assumptions.

Cost Sharing

Cost sharing amounts, including copays, coinsurance and deductibles, are used to reduce the price factors, where applicable.

Age/Gender Adjustments

The age and gender factors for both the benchmark plan and the proposed plan reflect the utilization of a standardized commercial population representative of the expected adult population to be covered under the proposed plan. Appendix C contains the distribution of adults assumed in the model. The population is derived from a typical commercial population of adults with dependent children contained in the Milliman HCGs.

Actuarial Cost Models

Appendix D contains the actuarial cost models for the benchmark benefit package and the proposed benefit package. The actuarial cost models provide the projected annual utilization rates per thousand, average charge, values of copays and coinsurance, and net claim cost by service category. The net claim costs are based on a July 1, 2001 claim date.

IV. ACTUARIAL EQUIVALENCY

The cost models shown in Appendix D illustrate the net claim cost per member per month for the benchmark benefit plan and the proposed plan. As shown in Table 1, the actuarial value of the proposed plan is roughly equivalent to (slightly greater than) the benchmark plan.

Table 1

STATE OF WASHINGTON
MEDICAL ASSISTANCE ADMINISTRATION
Summary of Aggregate Actuarial Value
Per Member Per Month Value (PMPM)

Plan	PMPM Value
UMP – Benchmark Plan	\$96.20
BH – Proposed Plan	\$96.46

V. CERTIFICATION

I, Timothy S. Barclay, am an Actuary with the firm of Milliman USA, Inc. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. The report has been prepared in accordance with the principles and standards of the Actuarial Standards Board of the American Academy of Actuaries. I was retained by the State of Washington Department of Social and Health Services Medical Assistant Administration to render an opinion on the actuarial value of coverage of the benchmark benefit package and the proposed benefit package. I meet the qualification standards set forth in Title XXI for rendering such an opinion.

In my opinion, the benchmark equivalent coverage proposed by the State of Washington in the form of BH meets the following requirements:

1. The coverage includes benefits for items and services within each of the categories of basic services described in Section 2103(c)(1) of the Social Security Act.
2. The coverage has an aggregate actuarial value that is at least actuarially equivalent to the State employee benefit plan, UMP.
3. With respect to each of the categories of additional services described in Section 2103(c)(2) of the Social Security Act for which coverage is provided by the proposed plan, the coverage has an actuarial value that is equal to at least 75% of the actuarial value of the coverage of that category of services in the State employee benefit plan, UMP.

4. The analysis was prepared using generally accepted actuarial principles and methodologies.
5. The analysis used a standardized set of utilization and price factors.
6. The analysis used a standardized population that is representative of the expected adult population to be covered under the proposal.
7. The analysis used the same principles and factors in comparing the value of different coverage.
8. The analysis was performed without taking into account any differences in coverage based on the method of delivery or means of cost control or utilization used.
9. The analysis took into account the ability of the State to reduce benefits by taking into account the increase in actuarial value of benefits coverage offered under the proposed plan that results from the limitations on cost sharing under such coverage.

Timothy S. Barclay, FSA, MAAA
Consulting Actuary
Milliman USA, Inc.
1301 Fifth Avenue, Suite 3800
Seattle, WA 98101-2605
(206) 504-5603

Date

Appendix A
Uniform Medical Plan
Schedule of In-Network and Out-of-Network Benefits

Annual medical/surgical deductible: \$200/person, \$600/family for preferred, non-preferred, and out-of-area providers.

Annual prescription drug deductible: \$100/person, \$300/family for participating, nonparticipating, and out-of-area pharmacies. This is a combined retail and home delivery (mail-order) deductible and is separate from the annual medical/surgical deductible.

Annual medical/surgical out-of-pocket limit: \$1,125/person, \$2,250/family for preferred and out-of-area providers.

Lifetime maximum: The total amount the UMP will pay for any enrollee is \$1,000,000.

Chemical dependency limit: \$10,680 per 24 months for Inpatient and Outpatient.

Mental health limit: 10 Inpatient day max/year; 20-outpatient visit max/year.

Therapy limit: 60-days inpatient; 60 treatments outpatient.

Out-of-area benefit: 80%.

Benefits	In-Network Benefit	Out-of-Network Benefit
Inpatient Hospital Services	100% after \$200 copay/day; \$600 max copay/year	60%
Outpatient Hospital & Ambulatory Services	90%	60%
Ambulance	80%	80%
Physician Services & Supplies (including limited alternative care providers)	90%	60%
Preventive Care, Well-Baby Care, & Family Planning	100%	60%
Emergency Room	90% after \$75 copay	80% after \$75 copay
Home Health Care	90%	60%
Prescription Drug <ul style="list-style-type: none"> Retail: 80% Generic / 70% Single-Source Brand / 50% Multi-Source Brand. Maximum coinsurance of \$75/prescription. Home delivery (mail order): Copays are \$5 Generic / \$30 Single-Source Brand / \$40 Multi-Source Brand. 		

Appendix B
Basic Health Program's
Schedule of Benefits

Annual deductible/coinsurance: None

Out-of-network / out-of-area benefit: None, except for emergency care.

Chemical dependency limit: Coverage limited to \$5,000 every 24 months with a \$10,000 lifetime maximum.

Mental health limit: Coverage limited to 10 Inpatient Days and 12 Outpatient Visits.

Benefits	Cost Sharing
Inpatient Hospital Services	\$100 copay per admission; \$500 maximum.
Outpatient Hospital & Ambulatory Services	\$25 copay
Emergency Room	\$50 copay
Ambulance	\$50 copay
Physician Services & Supplies	\$10 per office or home visit
Preventive Care, Well-Baby Care, & Family Planning	No copay
Maternity Care	No copay
Pharmacy	Tier 1: \$1 Copay Tier 2: \$5 copay Tier 3: 50%

Appendix C
Department of Social and Health Services
Medical Assistance Administration
State of Washington

Distribution of Parents of Medicaid Children

Age Bracket	Membership
Adult Male	
< 25	1.06%
25-29	3.60%
30-34	7.71%
35-39	10.18%
40-44	11.01%
45-49	8.82%
50-54	4.36%
55-59	1.39%
60-64	0.37%
65+	0.06%
Adult Female	
< 25	1.25%
25-29	3.98%
30-34	8.33%
35-39	10.93%
40-44	11.64%
45-49	9.08%
50-54	4.42%
55-59	1.39%
60-64	0.38%
65+	0.04%
Children	
0-1	0.00%
2-6	0.00%
7-18	0.00%
19-22	0.00%
Total	100.00%

Appendix D - 1
State of Washington Medical Assistance Administration - Actuarial Equivalency
Uniform Medical Plan (In-Network Benefits)
Estimated Medical Cost as of July 1, 2001

Benefit	Utilization Per 1,000	Allowed Average Charge	Per Member Per Month Claim Cost	Copay	Per Member Per Month Cost Sharing Value	Per Member Per Month Net Claim Cost
Hospital Inpatient						
Medical	85 Days	\$1,075.39	\$7.62	\$201.64	\$0.40	\$7.22
Surgical	51 Days	1,787.15	7.66	201.64	0.20	7.46
Psychiatric	13 Days	426.38	0.45		0.00	0.45
Alcohol & Drug Abuse	12 Days	308.04	0.30	201.64	0.04	0.26
Maternity	40.5 Days	1,042.26	3.52	201.64	0.36	3.16
Skilled Nursing Care	8 Days	235.40	0.15	201.64	0.01	0.14
	209 Days		\$19.70		\$1.01	\$18.69
Hospital Outpatient						
Emergency Room	113 Cases	\$158.46	\$1.50	\$50.00	\$0.47	\$1.03
Surgery	103 Cases	682.63	5.85		0.00	5.85
Radiology	230 Cases	247.50	4.74		0.00	4.74
Laboratory	248 Cases	80.11	1.66		0.00	1.66
Pharmacy and Blood	269 Services	30.53	0.68		0.00	0.68
Cardiovascular	110 Services	54.39	0.50		0.00	0.50
PT/OT/ST	38 Services	40.52	0.13		0.00	0.13
Other	93 Services	97.23	0.75		0.00	0.75
Maternity Non-Delivery	11.3 Cases	326.95	0.31		0.00	0.31
			\$16.12		\$0.47	\$15.65
Physician						
Inpatient Surgery	41 Proced.	\$1,012.55	\$3.44		\$0.00	\$3.44
Outpatient Surgery	484 Proced.	204.45	8.25		0.00	8.25
Anesthesia	85 Proced.	331.60	2.35		0.00	2.35
Inpatient Visits	144 Visits	53.59	0.64		0.00	0.64
Office/Home Visits	3,329 Visits	32.34	8.97		0.00	8.97
Urgent Care Visits	84 Visits	51.46	0.36		0.00	0.36
Consults	169 Consults	87.03	1.22		0.00	1.22
Emergency Room Visits	87 Visits	78.44	0.57		0.00	0.57
Immunizations & Injections	428 Proced.	29.45	1.05		0.00	1.05
Allergy Tests & Injections	1,078 Proced.	8.78	0.79		0.00	0.79
Physical Exams (Physician)	191 Exams	77.17	1.23		0.00	1.23
Vision, Hearing, Speech Exams	288 Exams	33.78	0.81		0.00	0.81
Physical Therapy	837 Services	16.47	1.15		0.00	1.15
Maternity Deliveries	21.4 Cases	1,149.43	2.05		0.00	2.05
Maternity Non-Deliveries	13.5 Cases	162.39	0.18		0.00	0.18
Radiology	1,258 Proced.	68.34	7.16		0.00	7.16
Laboratory	3,374 Proced.	18.95	5.33		0.00	5.33
Outpatient Psychiatric	518 Visits	53.39	2.30		0.00	2.30
Outpatient Alcohol & Drug Abuse	66 Visits	44.84	0.25		0.00	0.25
Chiropractor	1,367 Visits	21.15	2.41		0.00	2.41
Podiatrist	81 Visits	51.87	0.35		0.00	0.35
Misc. Medical	840 Proced.	36.56	2.56		0.00	2.56
			\$53.42		\$0.00	\$53.42
Other						
Prescription Drugs	6,674 Scripts	\$49.46	\$27.51	\$12.47	\$6.93	\$20.58
PDN/Home Health	39 Visits	133.17	0.43		0.00	0.43
Ambulance	24 Runs	154.48	0.31		0.00	0.31
DME/Prosthetics	115 Units	99.76	0.96		0.00	0.96
Glasses/Contacts	160 Services	129.16	1.72		0.00	1.72
Alternative Medicine	188 Visits	62.76	0.98		0.00	0.98
Smoking Cessation	30 Cases	250.00	0.63		0.00	0.63
			\$32.54		\$6.93	\$25.61
Total Medical Cost			\$121.78		\$8.41	\$113.37
Value of Deductible						(9.41)
Value of Coinsurance						(7.46)
Value of Out-of-Pocket Maximum						1.24
Total Medical Cost After Deductible and Coinsurance						\$97.74

Appendix D - 2
State of Washington Medical Assistance Administration - Actuarial Equivalency
Uniform Medical Plan (Out-of-Network Benefits)
Estimated Medical Cost as of July 1, 2001

Benefit	Utilization Per 1,000	Allowed Average Charge	Per Member Per Month Claim Cost	Copay	Per Member Per Month Cost Sharing Value	Per Member Per Month Net Claim Cost
Hospital Inpatient						
Medical	85 Days	\$1,075.39	\$7.62		\$0.00	\$7.62
Surgical	51 Days	1,787.15	7.66		0.00	7.66
Psychiatric	13 Days	426.38	0.45		0.00	0.45
Alcohol & Drug Abuse	12 Days	308.04	0.30		0.00	0.30
Maternity	40.5 Days	1,042.26	3.52		0.00	3.52
Skilled Nursing Care	8 Days	235.40	0.15		0.00	0.15
	209 Days		\$19.70		\$0.00	\$19.70
Hospital Outpatient						
Emergency Room	109 Cases	\$158.46	\$1.43	\$50.00	\$0.45	\$0.98
Surgery	103 Cases	682.63	5.85		0.00	5.85
Radiology	230 Cases	247.50	4.74		0.00	4.74
Laboratory	248 Cases	80.11	1.66		0.00	1.66
Pharmacy and Blood	269 Services	30.53	0.68		0.00	0.68
Cardiovascular	110 Services	54.39	0.50		0.00	0.50
PT/OT/ST	38 Services	40.52	0.13		0.00	0.13
Other	93 Services	97.23	0.75		0.00	0.75
Maternity Non-Delivery	11.3 Cases	326.95	0.31		0.00	0.31
			\$16.05		\$0.45	\$15.60
Physician						
Inpatient Surgery	41 Proced.	\$1,012.55	\$3.44		\$0.00	\$3.44
Outpatient Surgery	484 Proced.	204.45	8.25		0.00	8.25
Anesthesia	85 Proced.	331.60	2.35		0.00	2.35
Inpatient Visits	144 Visits	53.59	0.64		0.00	0.64
Office/Home Visits	3,070 Visits	32.34	8.27		0.00	8.27
Urgent Care Visits	76 Visits	51.46	0.32		0.00	0.32
Consults	164 Consults	87.03	1.19		0.00	1.19
Emergency Room Visits	83 Visits	78.44	0.55		0.00	0.55
Immunizations & Injections	404 Proced.	29.43	0.99		0.00	0.99
Allergy Tests & Injections	1,019 Proced.	8.78	0.75		0.00	0.75
Physical Exams (Physician)	173 Exams	77.17	1.11		0.00	1.11
Vision, Hearing, Speech Exams	265 Exams	33.76	0.74		0.00	0.74
Physical Therapy	772 Services	16.47	1.06		0.00	1.06
Maternity Deliveries	21.4 Cases	1,149.43	2.05		0.00	2.05
Maternity Non-Deliveries	13.5 Cases	162.39	0.18		0.00	0.18
Radiology	1,195 Proced.	68.19	6.79		0.00	6.79
Laboratory	3,181 Proced.	18.96	5.03		0.00	5.03
Outpatient Psychiatric	472 Visits	53.39	2.10		0.00	2.10
Outpatient Alcohol & Drug Abuse	61 Visits	44.84	0.23		0.00	0.23
Chiropractor	1,235 Visits	21.15	2.18		0.00	2.18
Podiatrist	73 Visits	51.87	0.31		0.00	0.31
Misc. Medical	792 Proced.	36.54	2.41		0.00	2.41
			\$50.94		\$0.00	\$50.94
Other						
Prescription Drugs	6,434 Scripts	\$49.47	\$26.52	\$12.47	\$6.69	\$19.83
PDN/Home Health	39 Visits	133.17	0.43		0.00	0.43
Ambulance	24 Runs	154.48	0.31		0.00	0.31
DME/Prosthetics	115 Units	99.76	0.96		0.00	0.96
Glasses/Contacts	160 Services	129.16	1.72		0.00	1.72
Alternative Medicine	188 Visits	62.76	0.98		0.00	0.98
Smoking Cessation	30 Cases	250.00	0.63		0.00	0.63
			\$31.55		\$6.69	\$24.86
Total Medical Cost			\$118.24		\$7.14	\$111.10
Value of Deductible						(8.63)
Value of Coinsurance						(35.87)
Value of Out-of-Pocket Maximum						15.71
Total Medical Cost After Deductible and Coinsurance						\$82.31

Appendix D - 3
State of Washington Medical Assistance Administration - Actuarial Equivalency
Basic Health Plan with Cost Sharing
Estimated Medical Cost as of July 1, 2001

Benefit	Utilization Per 1,000	Allowed Average Charge	Per Member Per Month Claim Cost	Copay	Per Member Per Month Cost Sharing Value	Per Member Per Month Net Claim Cost
Hospital Inpatient						
Medical	85 Days	\$1,075.39	\$7.62	\$100.00	\$0.18	\$7.44
Surgical	51 Days	1,787.15	7.66	100.00	0.10	7.56
Psychiatric	13 Days	426.38	0.45	100.00	0.02	0.43
Alcohol & Drug Abuse	11 Days	308.04	0.27	100.00	0.02	0.25
Maternity	40.5 Days	1,042.26	3.52			3.52
Skilled Nursing Care	8 Days	235.40	0.15			0.15
	208 Days		\$19.67		\$0.32	\$19.35
Hospital Outpatient						
Emergency Room	117 Cases	\$158.46	\$1.55	\$50.00	\$0.49	\$1.06
Surgery	103 Cases	682.63	5.85	25.00	0.21	5.64
Radiology	230 Cases	247.50	4.74			4.74
Laboratory	248 Cases	80.11	1.66			1.66
Pharmacy and Blood	269 Services	30.53	0.68			0.68
Cardiovascular	110 Services	54.39	0.50	25.00	0.11	0.39
Other	93 Services	97.23	0.75	25.00	0.10	0.65
Maternity Non-Delivery	11.3 Cases	326.95	0.31			0.31
			\$16.04		\$0.91	\$15.13
Physician						
Inpatient Surgery	41 Proced.	\$1,012.55	\$3.44			\$3.44
Outpatient Surgery	484 Proced.	204.45	8.25			8.25
Anesthesia	85 Proced.	331.60	2.35			2.35
Inpatient Visits	141 Visits	53.59	0.63			0.63
Office/Home Visits	3,127 Visits	32.34	8.43	10.00	2.61	5.82
Urgent Care Visits	81 Visits	51.46	0.35	10.00	0.07	0.28
Consults	166 Consults	87.03	1.20			1.20
Emergency Room Visits	90 Visits	78.44	0.59			0.59
Immunizations & Injections	415 Proced.	29.30	1.01			1.01
Allergy Tests & Injections	1,028 Proced.	8.78	0.75			0.75
Physical Exams (Physician)	210 Exams	77.17	1.35			1.35
Vision, Hearing, Speech Exams	42 Exams	25.02	0.09	10.00	0.03	0.06
Maternity Deliveries	21.4 Cases	1,149.43	2.05			2.05
Maternity Non-Deliveries	13.5 Cases	162.39	0.18			0.18
Radiology	1,206 Proced.	68.22	6.85			6.85
Laboratory	3,258 Proced.	18.94	5.14			5.14
Outpatient Psychiatric	397 Visits	53.39	1.77	10.00	0.33	1.44
Outpatient Alcohol & Drug Abuse	40 Visits	44.84	0.15	10.00	0.03	0.12
Misc. Medical	800 Proced.	36.55	2.44			2.44
			\$47.02		\$3.07	\$43.95
Other						
Prescription Drugs	6,968 Scripts	\$55.78	\$32.39	\$26.01	\$15.10	\$17.29
PDN/Home Health	39 Visits	133.17	0.43			0.43
Ambulance	24 Runs	154.48	0.31	50.00	0.10	0.21
DME/Prosthetics	5 Units	244.64	0.10			0.10
			\$33.23		\$15.20	\$18.03
Total Medical Cost			\$115.96		\$19.50	\$96.46